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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,652	09/27/2001	Leif Wilhelmsson	040071-694	9257
7590	05/06/2004			EXAMINER
Ronald L. Grudziecki, Esquire BURNS, DOANE, SWECKER & MATHIS, L.L.P. P.O. Box 1404 Alexandria, VA 22313-1404				BAKER, STEPHEN M
			ART UNIT	PAPER NUMBER
			2133	
			DATE MAILED: 05/06/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

X

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/963,652	WILHELMSSON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Stephen M. Baker	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 16 is/are allowed.
- 6) Claim(s) 1-7,12,15,19,21-27,32,35,36 and 39 is/are rejected.
- 7) Claim(s) 8-11,13,14,17,18,20,28-31,33,34,37,38 and 40 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 27 September 2001 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)              |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4,5</u> . | 6) <input type="checkbox"/> Other: _____.  |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "header" limitations recited in claims 3, 13, 20, 23, 33 and 40, the codeword-included number of sets "indication" limitations recited in claims 4, 12, 19, 24, 32 and 39, the determining of whether a codeword is retransmitted limitations recited in claims 10, 17, 30 and 37, the determining of how many times a codeword is retransmitted limitations recited in claims 11, 18, 31 and 38, the "third error correction code generator" and "logic that concatenates the third set" recited in claim 22, the "header generator" and "logic that concatenates the header" recited in claim 23, the "indication generator" and "logic that associates the generated indication" recited in claim 24, the "logic that uses a first set", "logic that uses a first set" and "logic that accepts" recited in claim 27, the "logic that determines whether a first level or error detection or a second level of error detection is to be used" recited in claim 28, the "logic that responds" recited in claim 29, the "logic that determines whether a codeword is a retransmitted codeword" recited in claims 30 and 37, the "logic that determines how many times the codeword was retransmitted" recited in claims 31 and 38, and the "logic that determines how many error detection checks should be performed" recited in claim 36 must be shown or the features canceled from the claims. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Specification***

2. Claims 3, 4, 10, 11, 13, 17-20, 22-24 and 27-40 are objected to because of the following informalities: the claimed subject matter is not shown. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 4, 12, 19, 24, 32 and 39 are rejected under 35 U.S.C. 112, first paragraph, because the best mode contemplated by the inventor has not been disclosed. Evidence of concealment of the best mode is based upon the lack of a disclosure of how a codeword is to "include" the "indication of how many sets of error detection check bits there are in the codeword".

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2133

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-7 and 21-26 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,654,853 to Moriyama et al (hereafter Moriyama).

Moriyama discloses adding one to three levels of interleaved Reed-Solomon error detection/correction coding to a block of bits and including an indication of the number of levels used for coding in a header. Moriyama's interleaved Reed-Solomon code is an error detecting code and a type of CRC, as it has a generator polynomial, as well as being an error correcting code. The generator polynomial of an interleaved Reed-Solomon code has the same form as an uninterleaved Reed-Solomon code, except that "X" is replaced with "X<sup>d</sup>", where "d" is the interleaving depth.

7. Claims 1, 6, 7, 15, 21, 26, 27, 35 and 36 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by U.S. Patent No. 6,282,691 to Sakata.

Art Unit: 2133

8. Claims 1, 6, 7, 15, 21, 26, 27, 35 and 36 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by the published article "Error-Burst Detection with Tandem CRC's" to Mazo et al.

***Allowable Subject Matter***

9. Claims 8, 9 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claim 16 is allowed.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Baker whose telephone number is (703) 305-9681. The examiner can normally be reached on Monday-Friday (11:00 AM - 7:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (703) 305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2133

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Stephen M. Baker  
Primary Examiner  
Art Unit 2133

smb